



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,179	07/17/2006	Cornelis C.A.M. Van Zon	US040086	2745

24737 7590 08/25/2010
PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER

ANYIKIRE, CHIKAODILI E

ART UNIT	PAPER NUMBER
----------	--------------

2621

MAIL DATE	DELIVERY MODE
-----------	---------------

08/25/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,179	Applicant(s) VAN ZON ET AL.	
	Examiner CHIKAODILI E. ANYIKIRE	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application is responsive to application number (10/586179) filed on July 17, 2006. Claims 1-20 are pending and have been examined.

Information Disclosure Statement

2. Acknowledgement is made of applicant's information disclosure statement.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-20 rejected under 35 U.S.C. 102(b) as being anticipated by Dantwala (US 2002/0075959).

As per **claim 1**, Dantwala discloses a video image display system, comprising:

a motion estimation circuit (Figure 1 element 130) adapted to generate motion vectors as a function of an incoming video signal and stored video data (paragraph 0045]; it is known in the art that a motion vector is produced from a current input frame and a stored reference frame); a front-end motion compensation circuit (Figure 1 element 170) adapted to generate a processed video signal as a function of the

Art Unit: 2621

incoming video signal, the motion vectors and stored video data (paragraph [0046]); and a video signal conversion circuit (Figure 1 element 180) adapted to generate a display signal for a specific video display as a function of the processed video signal and the motion vectors (paragraph [0059]).

As per **claim 2**, Dantwala discloses the system of claim 1, wherein the front-end motion compensation circuit includes the motion estimation circuit (Figure 1 element 130; paragraph [0045]).

As per **claim 3**, Dantwala discloses the system of claim 1, wherein the front-end motion compensation circuit is an upconversion circuit (Figure 1 element 180; paragraph [0059]).

As per **claim 4**, Dantwala discloses the system of claim 3, wherein the upconversion circuit is adapted to convert the incoming video signal to a signal having a higher frequency and to use the motion vectors to recreate motion phases of the output video at each temporal instant (paragraph [0059] - [0061]).

As per **claim 5**, The system of claim 1, wherein the front-end circuit includes a deinterlacing circuit.

As per **claim 6**, Dantwala discloses the system of claim 1, wherein the video signal conversion circuit includes a motion vector refinement circuit adapted to process the motion vectors for use by the video signal conversion circuit (paragraph [0046] and [0059]).

As per **claim 7**, Dantwala discloses the system of claim 6, wherein the motion vector refinement circuit is adapted to modify the motion vectors as a function of at least one of:

the resolution and the temporal phase of a video display for which the video signal conversion circuit generates the display signal (paragraph [0046] and [0059]; Dantwala generates motion vectors based on resolution).

As per **claim 8**, Dantwala discloses the system of claim 1, further comprising a memory adapted to store information for use by the motion front-end motion compensation circuit to store processing information for processing the incoming video signal (paragraph [0021]).

As per **claim 9**, Dantwala discloses the system of claim 1, further comprising a memory adapted to store information for use by the video signal conversion circuit to store processing information for generating the display signal (paragraph [0021]).

As per **claim 10**, Dantwala discloses the system of claim 1, wherein the video signal conversion circuit is adapted to receive a corresponding video signal from the front-end motion compensation circuit and to process the corresponding video signal by estimating spatio-temporal characteristics of components of the video signal relative to the specific video display (paragraph [0059]).

As per **claim 11**, Dantwala discloses the system of claim 10, further including means for reusing motion estimation data (paragraph [0059]).

As per **claim 12**, Dantwala discloses the system of claim 1, wherein the front-end motion compensation circuit includes computation means for implementing motion compensation functions (paragraph [0046]).

As per **claim 13**, Dantwala discloses the system of claim 12, wherein the video signal conversion circuit is adapted to receive a corresponding video signal from the front-end motion compensation circuit and to process the corresponding video signal by estimating spatio-temporal characteristics of components of the video signal relative to the specific video display (paragraph [0059]).

As per **claim 14**, Dantwala discloses the system of claim 1, wherein the front-end motion compensation circuit includes computation means for implementing high temporal refresh rate functions (paragraph [0059]).

As per **claim 15**, Dantwala discloses the system of claim 1, wherein the front-end motion compensation circuit includes computation means for implementing high resolution functions for color sequential displays (paragraph [0059]).

As per **claim 16**, Dantwala discloses the system of claim 1, wherein the front-end motion compensation circuit includes computation means for implementing high temporal refresh rate functions and for implementing the high resolution functions for color sequential displays (paragraph [0059]).

As per **claim 17**, Dantwala discloses the system of claim 16, wherein the video signal conversion circuit is adapted to receive a corresponding video signal from the front-end motion compensation circuit and to process the corresponding video signal by

Art Unit: 2621

calculating spatio-temporal characteristics of components of the video signal relative to the specific video display (paragraph [0059]).

Regarding **claim 18**, arguments analogous to those presented for claim 1 are applicable for claim 18.

Regarding **claim 19**, arguments analogous to those presented for claim 1 are applicable for claim 19.

Regarding **claim 20**, arguments analogous to those represented for claim 1 are applicable for claim 20.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIKAODILI E. ANYIKIRE whose telephone number is (571)270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272 - 7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2621

/Chikaodili Anyikire/
Patent Examiner AU 2621